

**Notice of Allowability****Application No.**

10/005,934

**Examiner**

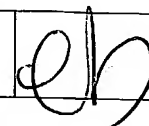
N. Bhat

**Applicant(s)**

PARRILLO ET AL.

**Art Unit**

1764



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to IDS of 5-19-2004.
2. ☒ The allowed claim(s) is/are 1-16 re-numbered as 1-11,13,12,and 14-16.
3. ☒ The drawings filed on 12 November 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 5-19-04,3-29-02,11-01
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the Abstract:

Line 8, Delete the paragraph indent, before "Yields"

2. The following is an examiner's statement of reasons for allowance:

The invention relates to a method for removing solvent from a solution of a polyphenylene ether polymer resin in a thin film evaporator the method comprising: a) feeding a solution comprising at least one organic solvent and a polyphenylene ether polymer resin into a thin film evaporator having a heating chamber, b) forming a film of solution on the wall of the heating chamber and c) heating the film in the heating chamber of the thin film evaporator operating under conditions for pressure, temperature, feed rate and solution solids concentration which satisfy two rate models, one mode defining a rate of by-product formation of less than 250 ppm, the other mode defines the vapor velocity of the material existing the thin film evaporator of less than 1.5 ft/s. By satisfying the rate models as claimed, the yields for removing substantially all solvent from a solution containing a polyphenylene ether polymer resin is maximized. The method as claimed has not been taught either singularly or in combination by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pelzer, Evkin et al. and Van Der Piepen'635 and '810 teach a thin film evaporator for the evaporation of solutions, colloids, suspensions or the like to concentrates; which has a heatable cylindrical evaporator casing coupled with a rotary drive, which evaporator casing has a feed inlet at one end in the form of a feed distributor. Wiper elements work together with the effective surface of the evaporator casing. The thin film evaporator permits an optimal setting of the retention time of the process material to be treated in the evaporator casing and has the effect that the thickness of the layer of the process material changes very little over the entire axial length. There is no suggestion in any other above references directed to a method of removing solvent from a solution of polyphenylene ether polymer resin in a thin film evaporator wherein the thin film evaporator operates under conditions for pressure, temperature, feed rate and solution solids concentration which satisfy two rate modes one model defining a rate of by-product formation of less than 250 ppm and the other model defining the vapor velocity of less than 1.5 ft/s. Patel 6,576,700 teaches providing a fire retardant reinforcing composition comprising a blend of polyphenylene ether resins. Braat et al. teach a process for the manufacture of low molecular weight polyphenylene ether having a viscosity range of 0.08 dl/g to about 0.16 dl/g by oxidative

coupling in a reaction solution comprising at least one monovalent phenol species using an oxygen containing gas and a complex metal catalyst to produce polyphenylene ether resin recovering the complex metal catalyst with an aqueous containing solution and isolating the polyphenylene ether resin through devolatilization of the reaction solvent wherein the devolatilization is accomplished at least in part with a spray drier, a wiped film evaporator, a flake evaporator, a flash vessel with melt pumps, or a devolatilizing extruder. Braat et al. does not teach the method of removing solvent from the polyphenylene ether polymer resin in a thin film evaporator as claimed by the instant invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**NINA BHAT**  
**PRIMARY EXAMINER**  
**GROUP 1300 1700**